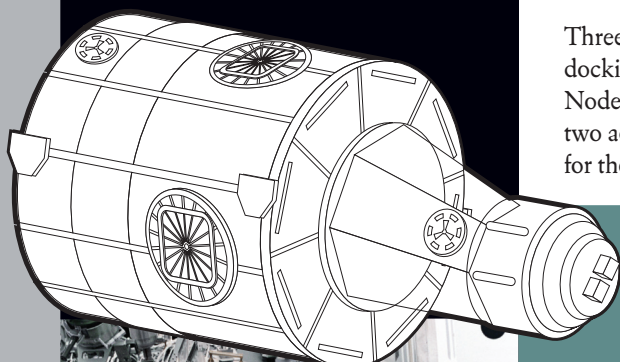


Pressurized Mating Adapters (PMAs)

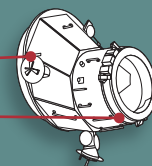
NASA/Boeing

Three conical docking adapters, called Pressurized Mating Adapters, allow the docking systems used by the Space Shuttle and by Russian modules to attach to the Node's berthing mechanisms. PMA 1 links the U.S. and Russian segments. The other two adapters serve as docking ports for the Space Shuttle and will do the same for the Crew Exploration Vehicle (CEV) and later commercial vehicles.



Common Berthing Mechanism Attachment
(50-in hatch width)

Androgynous Docking Port for FGB, Space Shuttle, and CEV
(30-in hatch width)



STAGE 4A/MISSION 2A.2B/STS-101



STAGE 4A/STS-97



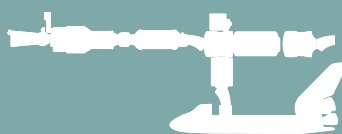
STAGE 5A/STS-98



STAGE 5A.1/STS-102



ASSEMBLY COMPLETE



EVA during mission 2A.2a with a view of PMA 1 between the FGB and Node 1.

Length	1.86 m (6.1 ft)
Width	1.9 m (6.25 ft) at wide end 1.37 m (4.5 ft) at narrow end
Mass of PMA 1	1,589 kg (3,504 lb)
PMA 2	1,376 kg (3,033 lb)
PMA 3	1,183 kg (2,607 lb)

Launch Date

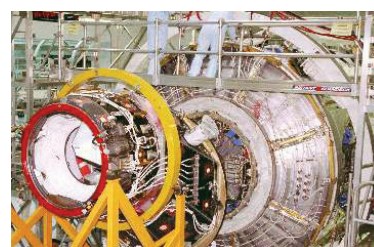
PMAs 1 and 2
Dec. 4, 1998
STS-88/ISS-2A

PMA 3
Oct. 11, 2000
STS-92/ISS-3A



PMA structure shows a series of offset aluminum cylinders.

The PMA 1, 2, and 3 structures are identical and provide a pressurized interface between the U.S. and Russian ISS modules and between the U.S. modules and the Space Shuttle orbiter. The PMA structure is a truncated conical shell with a 28-inch axial offset in the diameters between the end rings.



PMA 1 is being attached to the Common Berthing Mechanism of Node 1.



PMA 2 on the forward berthing ring of Node 1.